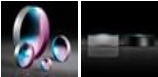


TECHSPEC<sup>®</sup> 9.0mm Dia. x -13.5 FL, VIS-NIR, UV Plano-Concave Lens



UV Fused Silica Plano-Concave (PCV) Lenses



Stock **#21-046** **5 In Stock**

[Other Coating Options](#)

-

1

+

£120<sup>00</sup>

ADD TO CART

Volume Pricing	
Qty 1-5	£120.00 each
Qty 6-25	£96.00 each
Qty 26-49	£90.40 each
Need More?	<a href="#">Request Quote</a>

ⓘ Prices shown are exclusive of VAT/local taxes

Product Downloads

SPECIFICATIONS

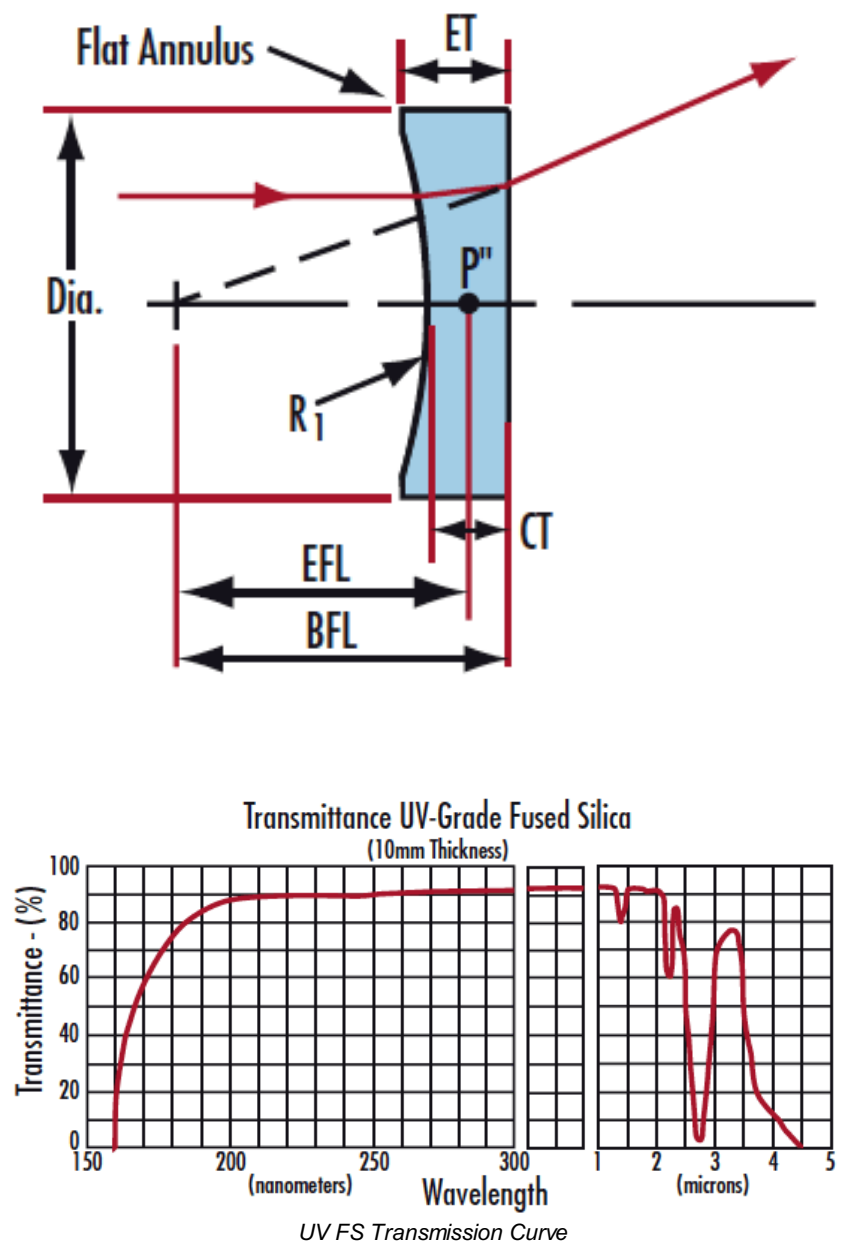
General	
Plano-Concave Lens	Type:
Max. Flat Annulus is 0.3mm	Note:
Physical & Mechanical Properties	
9.00 +0.0/-0.025	Diameter (mm):
2.00	Center Thickness CT (mm):
±0.05	Center Thickness Tolerance (mm):
<1	Centering (arcmin):
8.1	Clear Aperture CA (mm):
3.64	Edge Thickness ET (mm):
Optical Properties	
-13.50	Effective Focal Length EFL (mm):
Fused Silica (Corning 7980)	Substrate: <input type="checkbox"/>
1.5	f/#:
0.33	Numerical Aperture NA:
VIS-NIR (400-1000nm)	Coating:
400 - 1000	Wavelength Range (nm):
-14.89	Back Focal Length BFL (mm):
R <sub>abs</sub> ≤0.25% @ 880nm R <sub>avg</sub> ≤1.25% @ 400 - 870nm R <sub>avg</sub> ≤1.25% @ 890 - 1000nm	Coating Specification:
587.6	Focal Length Specification Wavelength (nm):
±1	Focal Length Tolerance (%):
-6.20	Radius R <sub>1</sub> (mm):
40-20	Surface Quality:
5 J/cm <sup>2</sup> @ 532nm, 10ns	Damage Threshold, Reference: <input type="checkbox"/>
1.5λ	Power (P-V) @ 632.8nm:
λ/4	Irregularity (P-V) @ 632.8nm:
Regulatory Compliance	
Compliant	RoHS 2015:
View	Certificate of Conformance:
Compliant	Reach 235:

## PRODUCT DETAILS

- Negative Focal Lengths for Beam Expansion or Light Projection Applications
- Wavelength Range of 200 - 2200nm
- Popular UV-AR Coating Option Available

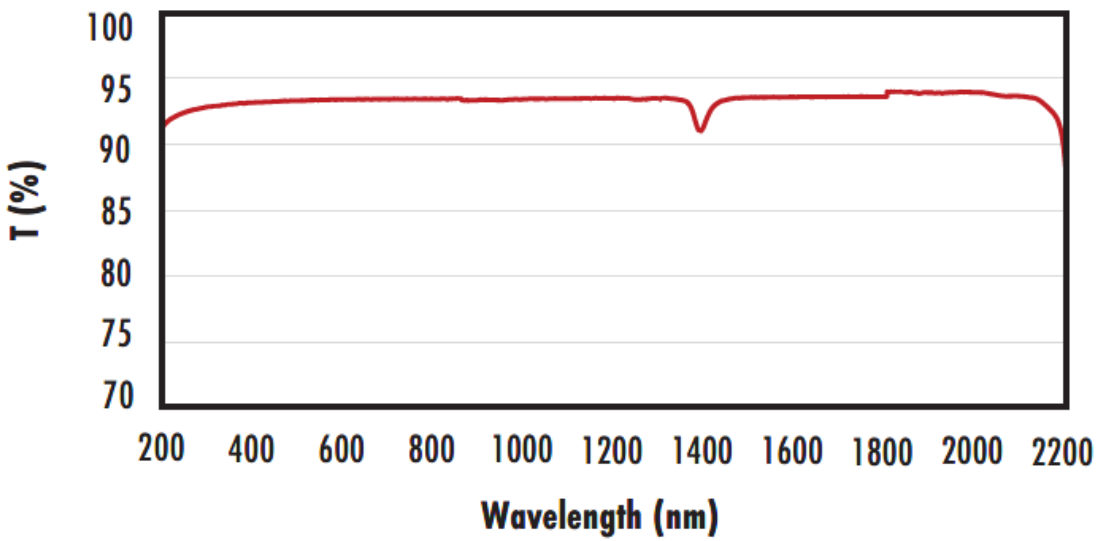
TECHSPEC® UV Fused Silica Plano-Concave (PCV) Lenses are high performance UV optic elements, manufactured utilizing state of the art CNC equipment. Zygo's GPI-XP Interferometer is used to assure the surface accuracy and performance of these UV optics. UV Grade lenses are precision manufactured using research-grade synthetic fused silica. In addition to providing excellent transmission characteristics and higher operating temperatures, synthetic fused silica also exhibits an exceptional inclusion specification and chemical purity. TECHSPEC® UV Fused Silica Plano-Concave (PCV) Lenses are an ideal choice for many laser and imaging applications, particularly those involving ultraviolet wavelengths. A broadband anti-reflection coating is available for optimized throughput in the ultraviolet spectrum.

TECHNICAL INFORMATION



FUSED SILICA

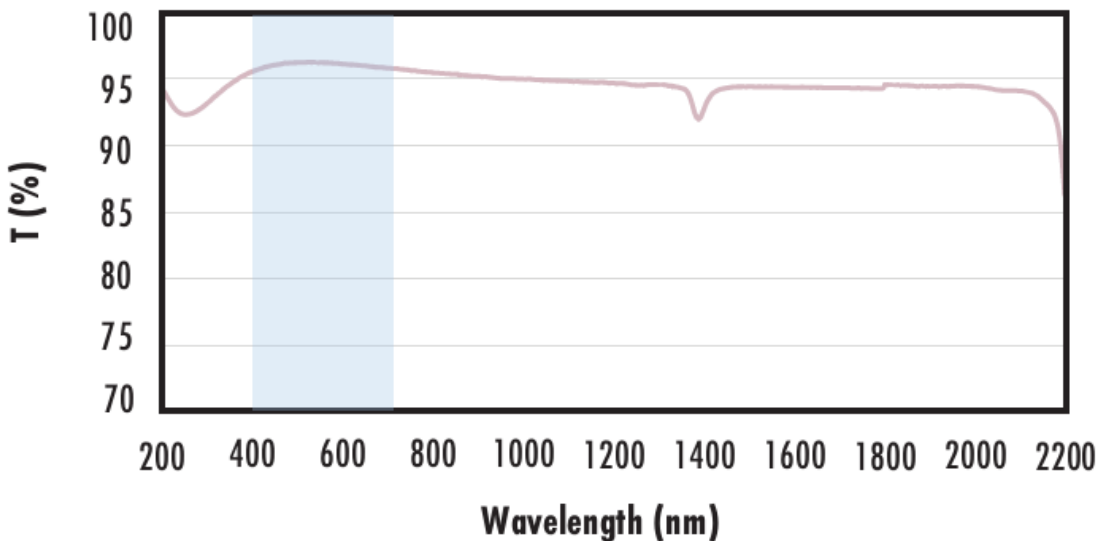
Uncoated Fused Silica  
Typical Transmission



Typical transmission of a 3mm thick, uncoated fused silica window across the UV - NIR spectra.

[Click Here to Download Data](#)

Fused Silica with  $MgF_2$  Coating  
Typical Transmission



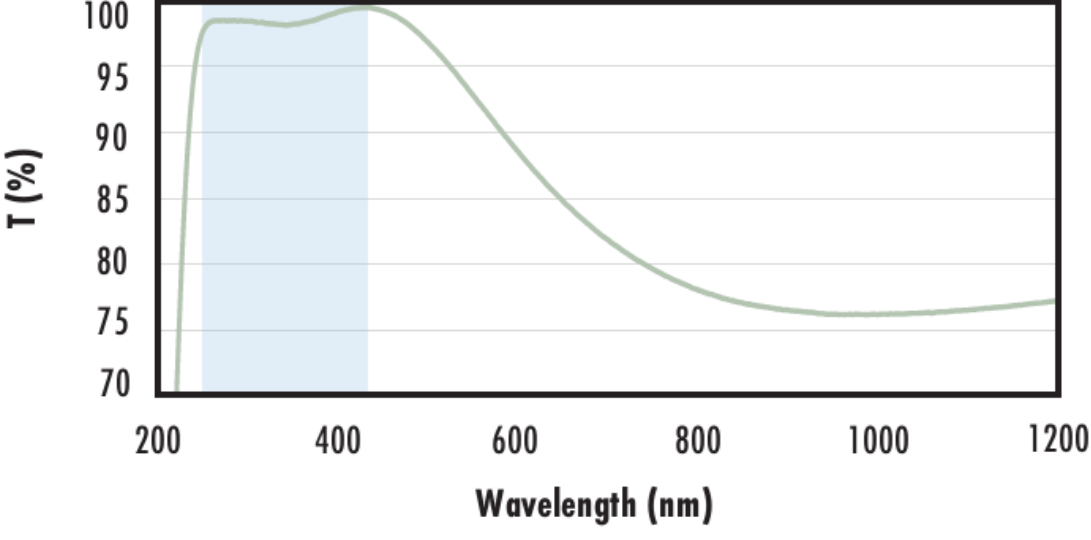
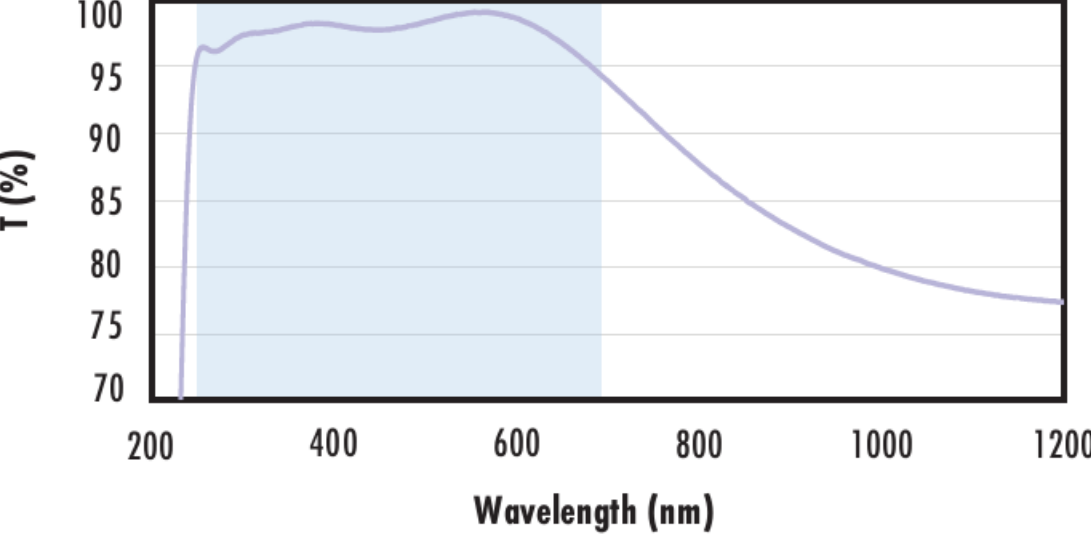
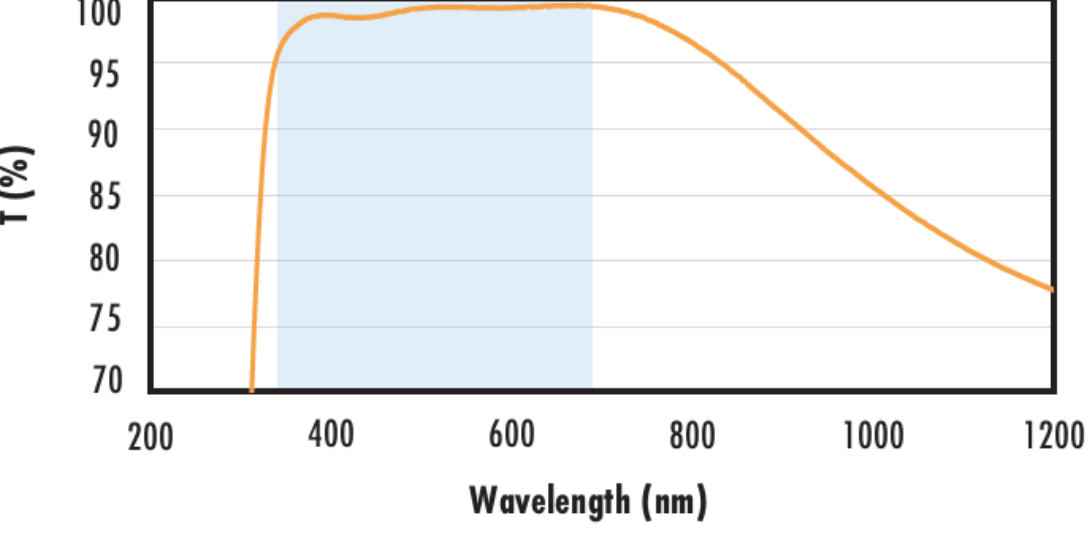
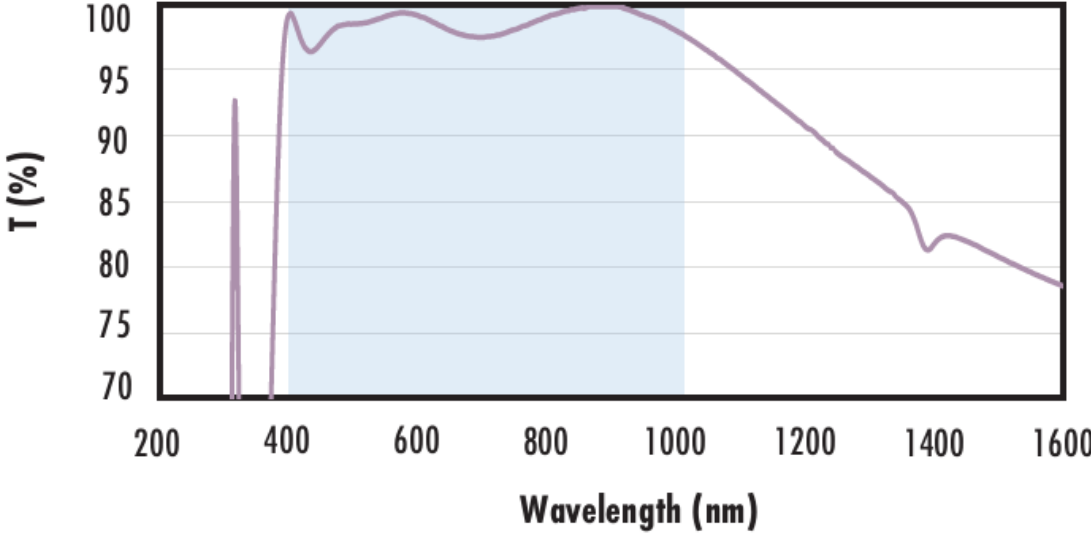
Typical transmission of a 3mm thick fused silica window with  $MgF_2$  (400-700nm) coating at 0° AOI.

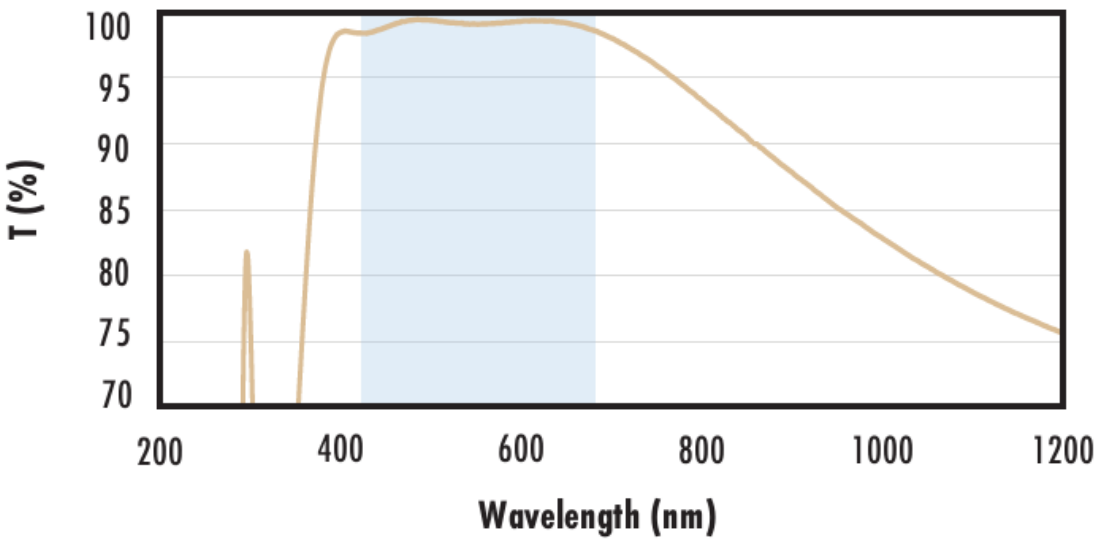
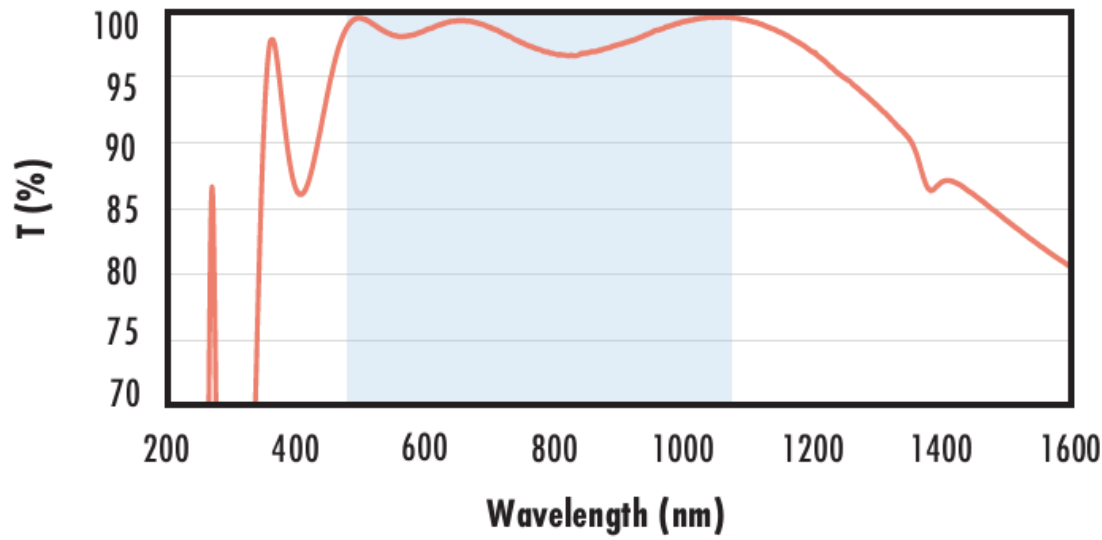
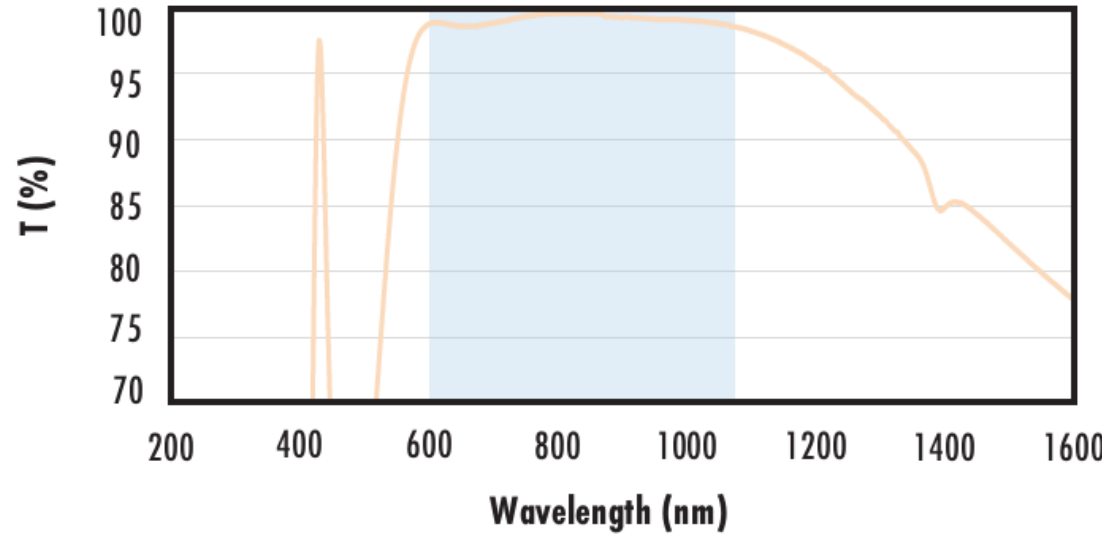
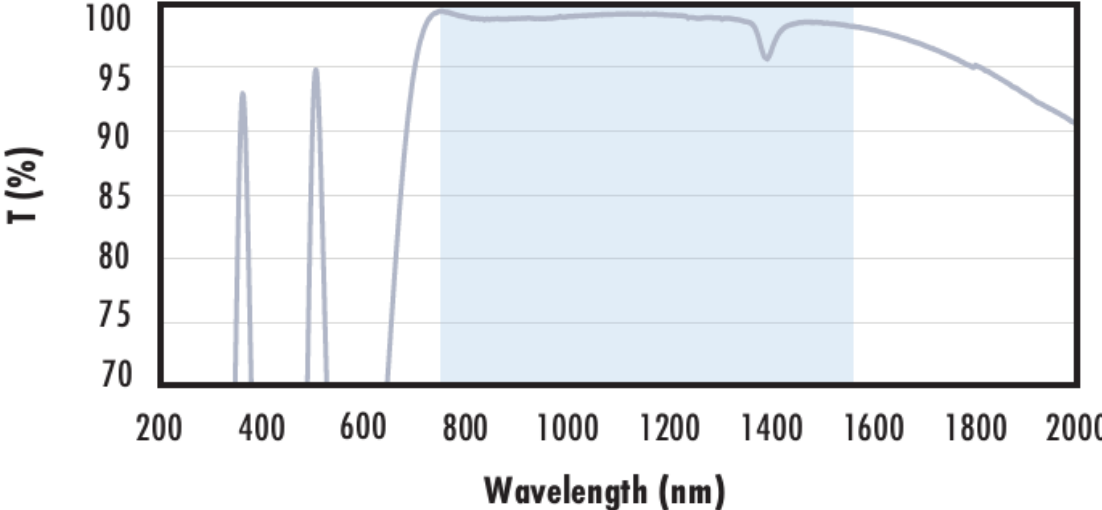
The blue shaded region indicates the coating design wavelength range, with the following specification:

$R_{avg} \leq 1.75\% @ 400 - 700nm$  (N-BK7)

Data outside this range is not guaranteed and is for reference only.

[Click Here to Download Data](#)

<div><div><div>Fused Silica with UV-AR Coating</div><div>Typical Transmission</div><div></div></div></div>	<div><div>Typical transmission of a 3mm thick fused silica window with UV-AR (250-425nm) coating at 0° AOI.</div><div>The blue shaded region indicates the coating design wavelength range, with the following specification:<div><div><math>R_{abs} \leq 1.0\%</math> @ 250 - 425nm</div><div><math>R_{avg} \leq 0.75\%</math> @ 250 - 425nm</div><div><math>R_{avg} \leq 0.5\%</math> @ 370 - 420nm</div></div></div><div>Data outside this range is not guaranteed and is for reference only.</div><div><a href="#">Click Here to Download Data</a></div></div>
<div><div><div>Fused Silica with UV-VIS Coating</div><div>Typical Transmission</div><div></div></div></div>	<div><div>Typical transmission of a 3mm thick fused silica window with UV-VIS (250-700nm) coating at 0° AOI.</div><div>The blue shaded region indicates the coating design wavelength range, with the following specification:<div><div><math>R_{abs} \leq 1.0\%</math> @ 350 - 450nm</div><div><math>R_{avg} \leq 1.5\%</math> @ 250 - 700nm</div></div></div><div>Data outside this range is not guaranteed and is for reference only.</div><div><a href="#">Click Here to Download Data</a></div></div>
<div><div><div>Fused Silica with VIS-EXT Coating</div><div>Typical Transmission</div><div></div></div></div>	<div><div>Typical transmission of a 3mm thick fused silica window with VIS-EXT (350-700nm) coating at 0° AOI.</div><div>The blue shaded region indicates the coating design wavelength range, with the following specification:<div><div><math>R_{avg} \leq 0.5\%</math> @ 350 - 700nm</div></div></div><div>Data outside this range is not guaranteed and is for reference only.</div><div><a href="#">Click Here to Download Data</a></div></div>
<div><div><div>Fused Silica with VIS-NIR Coating</div><div>Typical Transmission</div><div></div></div></div>	<div><div>Typical transmission of a 3mm thick fused silica window with VIS-NIR (400-1000nm) coating at 0° AOI.</div><div>The blue shaded region indicates the coating design wavelength range, with the following specification:<div><div><math>R_{abs} \leq 0.25\%</math> @ 880nm</div><div><math>R_{avg} \leq 1.25\%</math> @ 400 - 870nm</div><div><math>R_{avg} \leq 1.25\%</math> @ 890 - 1000nm</div></div></div><div>Data outside this range is not guaranteed and is for reference only.</div><div><a href="#">Click Here to Download Data</a></div></div>
<div><div><div>Fused Silica with VIS 0° Coating</div></div></div>	

<p><b>Typical Transmission</b></p> 	<p>Typical transmission of a 3mm thick fused silica window with MS 0° (425-675nm) coating at 0° AOI.</p> <p>The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p><math>R_{avg} \leq 0.4\% @ 425 - 675nm</math></p> <p>Data outside this range is not guaranteed and is for reference only.</p> <p><a href="#">Click Here to Download Data</a></p>
<p><b>Fused Silica with YAG-BBAR Coating</b> <b>Typical Transmission</b></p> 	<p>Typical transmission of a 3mm thick fused silica window with YAG-BBAR (500-1100nm) coating at 0° AOI.</p> <p>The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p><math>R_{abs} \leq 0.25\% @ 532nm</math> <math>R_{abs} \leq 0.25\% @ 1064nm</math> <math>R_{avg} \leq 1.0\% @ 500 - 1100nm</math></p> <p>Data outside this range is not guaranteed and is for reference only.</p> <p><a href="#">Click Here to Download Data</a></p>
<p><b>Fused Silica with NIR I Coating</b> <b>Typical Transmission</b></p> 	<p>Typical transmission of a 3mm thick fused silica window with NIR I (600 - 1050nm) coating at 0° AOI.</p> <p>The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p><math>R_{avg} \leq 0.5\% @ 600 - 1050nm</math></p> <p>Data outside this range is not guaranteed and is for reference only.</p> <p><a href="#">Click Here to Download Data</a></p>
<p><b>Fused Silica with NIR II Coating</b> <b>Typical Transmission</b></p> 	<p>Typical transmission of a 3mm thick fused silica window with NIR II (750 - 1550nm) coating at 0° AOI.</p> <p>The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p><math>R_{abs} \leq 1.5\% @ 750 - 800nm</math> <math>R_{abs} \leq 1.0\% @ 800 - 1550nm</math> <math>R_{avg} \leq 0.7\% @ 750 - 1550nm</math></p> <p>Data outside this range is not guaranteed and is for reference only.</p> <p><a href="#">Click Here to Download Data</a></p>

## CUSTOM

Edmund Optics offers comprehensive custom manufacturing services for optical and imaging components tailored to your specific application requirements. Whether in the prototyping phase or preparing for full-scale production, we provide flexible solutions to meet your needs. Our experienced engineers are here to assist—from concept to completion.

Our capabilities include:

- Custom dimensions, materials, coatings, and more
- High-precision surface quality and flatness
- Tight tolerances and complex geometries
- Scalable production—from prototype to volume

Learn more about our [custom manufacturing capabilities](#) or submit an inquiry [here](#).

## COMPATIBLE MOUNTS

